

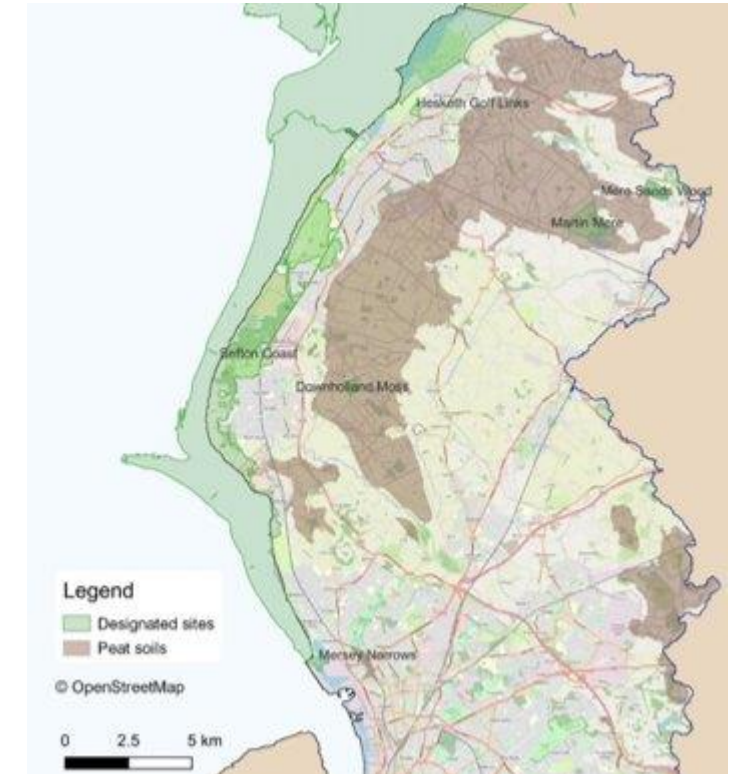
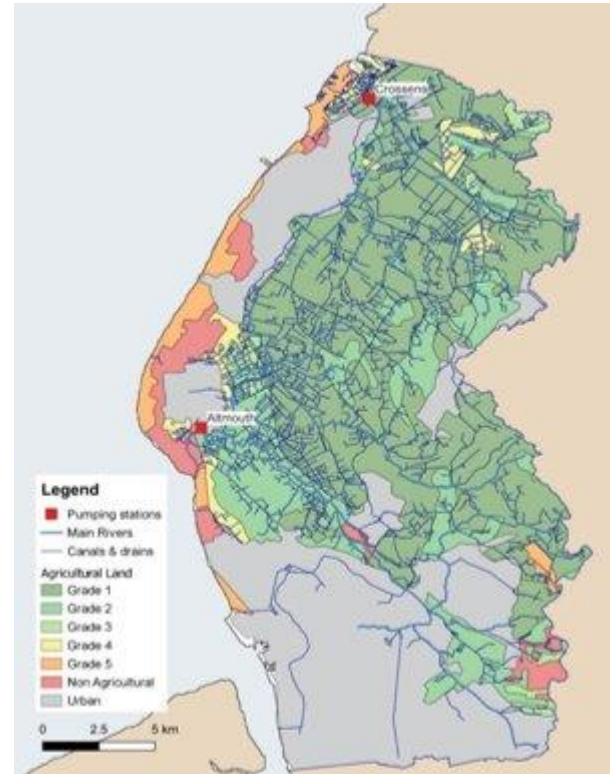
Wetter farming and hydrology in the Alt Crossens Catchment

An examination of the challenges and opportunities

Why the Alt Crossens?

At a glance

- Low lying, below sea level
- Grade 1 & 2 agricultural land
- Reliance on two main & 11 satellite pumping stations
- 400+ farm holdings covering 39,500 ha
- £230m in gross value added to economy



Issues

- Land vulnerable to increased flooding
- Peat degradation – 50 years remaining
- 1.6cm peat loss per year

Goosemeadow Farm

Preliminary hydrological assessment on four fields

- Identify flood risk
- Feasibility and implications of raising water table
- Water source/storage required
- Is water required from elsewhere?
- Assess water quality



Data reviewed to inform wetter farming set up options:

- Topography
- Soils
- Flood extents
- Catchment areas & Catchment flows
- Drainage ditching
- Annual rainfall
- Typical evapotranspiration,
- Water storage & pumping options (of accumulated water)
- Water quality
- The requirement for selected field re-wetting

Conclusions



More info needed on source of flows, annual volumes, and water quality



Using storage or other water sources



Scale dependency



Investigate catchment reconnection



Flooding



Investigate if the expense of reducing the 'pollutants' in the available water sources is economically feasible